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BUSINESS MODEL INNOVATION AFTER DISRUPTIONS: A PROCESS STUDY OF AN INCUMBENT MEDIA ORGANIZATION[1]

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ABSTRACT

We investigate the *process* through which incumbents respond to disruptions by opening up their business models. We conducted a longitudinal study (1995-2016) of a major media publishers responding to the Internet. We find that incumbents increase the access to external knowledge to seize opportunities and fend off low-end disruptors.

INTRODUCTION

An important reason why disruptive innovations are difficult for incumbents to manage is because they usually require a new or at least a modification of the firm's existing business model (Chesbrough and Rosenbloom, 2002; Christensen, Raynor, and McDonald, 2016). For instance, recent careful work shows the challenges new entrants face when introducing disruptive innovations into an existing ecosystem (Ansari, Garud, and Kumaraswamy, 2016). We complement this burgeoning perspective by focusing on business model changes required by incumbent firms when facing disruptive innovation. Incumbents in almost all industries today are in search for sustainable business models, especially after the advent of disruptive digital platforms such as Facebook, Netflix, Udacity and Uber (McKinsey, 2015). While there is theoretical agreement on the fact that disruptive innovations can render incumbents' business models obsolete, much less is known about how incumbents should reconfigure their existing business models. To address the dearth of research regarding business model innovation in the face of disruptive changes we ask: How do incumbents reconfigure their business model to respond to disruptive innovations? How does the process of business model innovation unfold overtime in an established organization?

To answer these questions, we conducted an in-depth longitudinal study of a major news publishing house in Europe, namely the Italian company Gruppo Editoriale L'Espresso (hereafter: GELE). This large media group publishes the national newspaper *La Repubblica*, and owns several local newspapers, radios, TV stations, advertising and printing operations. The global media industry has been profoundly disrupted by the Internet (The Economist, 2011; Forbes, 2015) with a dramatic impact on the news' publishing business models (The Wall Street Journal, 2016). Therefore, the setting represented a quintessential case for our research questions. We considered a broad time horizon including the advent and common adoption of the Internet (1995-2016), and thus we were able to examine how the focal company transformed its original business model by experimenting with several new open innovation projects over time.

We use the comparison of successful and unsuccessful projects to inform our theory development about how a company transforms an existing model by accessing external knowledge (Grant and Baden-Fuller, 2004) while maintaining its internal knowledge base. To establish a theoretical foundation, we build on and integrate several streams of research. The disruptive innovation literature suggests that incumbents should preempt low-end disruptions by entering the very same low-end markets that disruptors use as their first beachhead (Christensen and Bower, 1996; Christensen, 1997). The business model and platform literatures highlight the importance of creating new and innovating business models to create and capture value (Teece, 2007; Zott, Amit, and Massa, 2011), more recently by focusing on the multi-sided nature of many new technology businesses (Ansari et al., 2016; Cennamo and Santalo, 2013). The open innovation literature illustrates the benefits of opening up the firms' boundaries to external knowledge sources (Chesbrough, 2003; Dahlander and Gann, 2010). We integrate and advance these literature streams by developing a theoretical model that details the process through which incumbents exploit external knowledge sources to open up their existing business models in order to compete against low-end disruptors.

METHODOLOGY

Given the scant understanding of the relationship between disruptions and business models, an inductive and field-based approach was particularly suited to develop our theory (Eisenhardt, 1989; Garud et al. 2002). To deconstruct the process of business model innovation in a company, we took an historical process perspective (Van de Ven and Poole, 1990) and conducted a longitudinal single-case study.

Research Setting

We carefully examined the evolution of a major media company, GELE, with a real data collection covering the period 1995-2016, when the adaptation to the Internet was a visible phenomenon (Pettigrew, 1979). The level of analysis is the business model, and we delved deeply into the organization to collect data about the new entrepreneurial projects and ventures through which the company was seeking to innovate its business model.

We chose to study the newspaper industry and GELE for several reasons. First, the digital disruption caused by the Internet has devalued newspapers' business model, which needed to be reinvented, at least partially (The Economist, 2011; Seamans and Zhu, 2014). Second, there was a unique opportunity to study a process of business model innovation given that publishing companies were organized through a closed model of production and commercialization while the web has enabled open journalisms (OECD, 2007) through new toolkits for users (Von Hippel and Katz, 2002). Third, GELE has been among the world's fastest media companies to adopt digital technologies, and one of the most innovative online and offline, so revealing an ability to balance new and old ways of creating value. Commencing in 1997, this publisher launched a series of projects that gradually opened its business model. These are experiments that we could observe and analyze. Finally, we had a privileged access to the company to collect rich field-level longitudinal data.

Data Collection and Analysis

Following five years of professional experience in the newspaper industry, the lead researcher conducted three years of both historical and real-time data collection in the field, covering the period from 1995 to 2014. We gained access to all types of internal (and confidential) company reports, business plans, financial records, and to personnel from all functions and hierarchical levels. We started gathering our data in 2012 and continued in the field till the end of 2014, despite we kept collecting and extending the sole archival data until 2016. Our primary source were company interviews. We conducted 46 face-to-face interviews, 38 of which with GELE’s personnel and 8 with informants in four entrants and related industry associations. As a second source, we systematically consulted all available archival data for 1995-2016. A third effort of data collection referred to switching the locus of observation to the external environment, in order to contextualize GELE’s strategic reactions to disruptions. To examine how the external market evolved and how this affected GELE’s existing business model, we first analyzed all public documentations available for the period 1995-2016 about the entire Italian newspaper industry. We visited and collected data from industry associations such as the Federation of Italian Editors and Journalist (FIEG), industry agencies that collect audience data (e.g., Audipress; Nielsen), antitrust authorities (AGCM), and government agencies for communication (AGCOM). We then conducted interviews with four new entrants that were indicated as potential disruptors.

In analyzing our data, we began by constructing a chronology of historical events about GELE for the period 1995-2016. We deconstructed a timeline based on the company’s major strategic decisions, project lunched, investments in major innovations, outcomes, significant market changes, and the entry of potential disruptors. We made this analysis for the company offline and online businesses, but we emphasized the online aspect due to our focus on disruptions. We identified the new entrepreneurial projects and ventures that GELE undertook to create new digital businesses. For each, we tried to understand its nature based on existing theories and on the observed phenomenon. Our content analysis of interviews and documents revealed that most of the new digital projects of GELE had the characteristic of open innovation projects (Chesbrough, 2006; von Hippel, 1986). This was a useful learning through the analysis of our data as it suggested us that the company was trying to gradually open its business model through the exploitation of external knowledge sources. For a more precise assessment of the nature of each project, we drew on the user and open innovation literature.

FINDINGS

A Process of Business Model Innovation after Disruptions

We found that the process of business model innovation for incumbents can be initiated and sustained by two major triggering factors: (1) the opportunities created by new disruptive technologies in a first phase; and (2) the threat of disruptors entering at the low-end of the market in a second phase. The two factors have different and additive effects for the process through which incumbents innovate their business model overtime.

In a first phase, the availability of new disruptive technologies may favor incumbents to experiment with potential new opportunities in the market (phase 1). We found that incumbents experiment with new models of value creation, when the new disruptive technologies enable external knowledge production beyond the boundaries of their firms. In a second phase, the potential entry of new companies acting as disruptors may induce incumbents to further adapt their business model to a next level (phase 2). Disruptors tend to use new business model that makes in part obsolete the existing models of incumbents (Chesbrough and Rosenbloom, 2002; Christensen et al., 2016), eroding their profits. As recent studies show, most of the successful disruptors in the digital market are operating as platforms implementing multi-sided business models (Ansari et. al. 2016; Gawer and Cusumano, 2002). We found that incumbents in phase 2 are likely to mimic the strategies of successful entrants, by exploring forms of value creation and capture that are different from phase 1, and by increasingly relying on external alliances and acquisitions rather than just on self-experimentation. Therefore, the attempt to fend off strong disruptors may induce incumbents to further open their business models, but in this case the major mechanisms can be the cooperation with external partners or even disruptors (Gans, 2016).

DISCUSSION

Our primary contribution is the presentation of a process model detailing how incumbents respond to disruptions by innovating their business model. Based on an in-depth longitudinal study of the digital disruption in a major news media company, we find that the exploitation of external knowledge presents a critical avenue for incumbents to modify their existing business models. This in turn allows incumbents to adapt to and manage disruptions. The model that emerged from GELE's history provides new insights into the process of opening firms' boundaries to external knowledge to counterbalance the devaluation of existing business models after disruptions.

The Process Model

We derived a two-phased process model of adaptation to disruptions. Our findings reveal that incumbents employ different mechanisms to innovate their business model as the disruption process unfolds. The mechanisms tend to differ overtime because the triggering factors change as the disruption advances. Initially, the triggering factor for an incumbent is represented by the arrival of new disruptive technologies. Later the main triggering factor is represented by the emergence of dominant disruptors. The first phase that incumbents confront is the arrival of the new disruptive technologies, and the second phase is the entry of disruptors that can make obsolete incumbents' existing business models (Chesbrough and Rosenbloom, 2002; Christensen et al., 2016).

During Phase 1 of the process, the initial arrival of the new disruptive technologies constitutes an 'opportunity' for incumbents to innovate their business model. GELE was found to be a pioneer in the digital market, through internal investments and through an exclusive alliance with an MIT-based exclusive consortium. All this suggests that, in an initial phase, incumbents experiment by themselves to seize the opportunity before their competitors. This would be consistent with the race for dominant design that traditional technological change studies would predict (Abernathy and Utterback, 1978). From a business model perspective, this initial phase characterizes the moment in which an incumbent starts exploring with new forms of value creation and capture (Amit and Zott, 2001). We found that an incumbent that starts experiment with new external knowledge can gradually transform its more closed model by opening its knowledge boundaries (Brusoni and Prencipe, 2001) to new sources of production (Chesbrough, 2013).

During Phase 2, the entry of disruptors constitutes a threat that works as a catalyst for incumbents (Cyert and March, 1963) to further innovate and open their models. The entry of disruptors can trigger business model innovation for an incumbent because disruptors tend to introduce new business models that make obsolete the existing ones (Ansari et. al, 2016; Chesbrough and Rosenbloom, 2002). The response of incumbents in the second phase might need to be quicker and more significant compared to the first phase, since disruptive entrants might already have gained sufficient advantage. Moreover, and as explained in the full paper, disruptors that effectively exploit large quantities of external knowledge tend be platforms exploiting the long tail (Brynjolfsson et al., 2011). For these two major reasons, we expect that incumbents trying to fend-off disruptors (Christensen, 2003) in Phase 2 are more likely to use structured governance mechanisms, such as alliances, partnerships, and acquisitions, which allow them to rapidly catch up and to access more external knowledge through cooperation. For instance, GELE was found to form a *video syndication platform* with other external newspapers to access each other knowledge and jointly compete against disruptors like Google. At the same time, the company was also found to acquire a disruptor in the crowdsourcing and movie space, *mymovie.it*, and to cooperate with major media disruptors through strategic JVs for new entry in Italy (the *Huffington Post* and *Business Insider*).

In summary, the process model derived from our study helps understanding *what* incumbents can do to respond to disruptions and *how*. Our historical and in-depth analysis of GELE and its ecosystems reveals that incumbents can respond to disruptions by increasingly exploiting external knowledge to open their business model. In an initial phase of the process of business model innovation, experimentation and stand-alone efforts tend to be the prevalent mechanisms used by incumbents. However, in a subsequent phase, alliances, joint ventures, acquisitions, and even diversification efforts tend to be more suitable mechanisms to innovate a business model furtherly.

Contributions to Business Model Literature

A first direct contribution of our study is to the literature of business model and business model innovation (Afuah and Tucci, 2012; Zott and Amit, 2007). While business model is considered an important construct and level of analysis to understand competitive advantage, the literature also acknowledges that the process of business model innovation is still relatively overlooked and complex to examine. Through our in-depth longitudinal study, we tried to shed new light on the causes triggering business model innovation and on the mechanisms used to implement it overtime. For instance, we observe that cooperation may be an important mechanism to innovate an existing model (Bock et al., 2012) after the entry of disruptors. Moreover, our study also indicates a 'directionality of the innovation' after disruption, which emerged to be from the internal to the external, and more precisely from a close to a more open model of value creation through external knowledge. This offers additional important implications for the literature on open innovation and open business models (Chesbrough, 2013; Von Hippel and Von Krogh, 2003).

Contributions to Technological Change and Disruption Literature

A second intended contribution is to complement technological change (Tushman and Anderson, 1986; Henderson and Clark, 1990; Christensen and Bower, 1997) and incumbent adaptation literatures (Helfat et al., 2009; Teece et al., 1997; Tripsas and Gavetti, 2000). Differently from the major tradition of technological change studies, we do not examine the root causes of incumbent failure (e.g., competence destruction, resources, cognition) but rather we illustrate how firms can innovate their business model after disruptions. The disruptive innovation framework is key to explain failure (Christensen and Bower, 1996; Christensen, 1997), but the understanding of incumbent responses to avoid failure has remained limited (Christensen, 2003; Gans, 2016). Instead, we provide one of the first detailed characterization of the process of response by incumbents. More importantly however, we observe and theorize *how* an incumbent respond in each of the two phases. We explain how incumbents can continue to create and capture value after disruptions, being triggered initially by opportunities and later by threats, and illustrate some of the mechanisms used in each phase. Our model also complements Ansari et al. (2016), since the scholars examined exactly the opposite problem of how an entrant, *TiVo*, can impose its disruptive business model to incumbents and the rest of the ecosystem.

Contributions to Platform Literature

A third contribution is to the growing literature on platforms (Gawer and Cusumano, 2002; Cennamo and Santalo, 2013). While most of the literature focuses on platform competition from the lens of successful new platforms (e.g., eBay, Amazon, Facebook), we examined instead how an incumbent platform (e.g., a newspaper) is destroyed and need to reinvent its business. The industry we studied (news media) is a platform-based industry since it matches audiences and advertisers. We explained how an incumbent platform organization responds to digital disruptive platforms by maintaining its own two-sided business model but also trying to open it through new forms of value creation based on external knowledge. Moreover, GELE's history also reveals that incumbent platforms may find difficult to create disruptive new platforms by themselves (e.g., the failures of the personalized news platform and the participatory journalism platform) but they can solve the problem by partnering with or acquiring new successful platforms (e.g., the JV with the Huffington Post; the acquisition of *mymovies.it*).

ENDNOTES

1. The full paper has been submitted to the Journal of Management Studies (JMS); the submission of this abridged version to the Academy of Management 2017 Proceeding is made with the approval of JMS.

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